

PERSONAL INFORMATION Gabriele Mascetti

POSITION Head of Scientific Coordination Unit, Italian Space Agency (ASI)
Head of Human Spaceflight Office, ASI
International Space Station ASI Program manager
Italian Delegate at the

- ESA Human Spaceflight, Microgravity and Exploration Programme Board
- ESA Exploration and Utilization Board

Tender/Project Responsible Officer (for the Italian law, Ultimate Project Manager) for 50+ national contracts, 20+ M€

WORK EXPERIENCE

Nov 2020- today

Head of the Scientific Coordination Unit**Head of the Human Spaceflight Office****Italian Space Agency**, ASI, Rome, Italy (www.asi.it)

- Coordinator of personnel employed in the unit (up to 50 people)
- Responsible officer for all the contracts awarded by the unit; more than 50 contracts for an overall value exceeding 20 M€
- Italian delegate at the European Space Agency (ESA) program board HME (Human Spaceflight, Microgravity and Exploration), managed budget 150M€/yr.
- Italian delegate at the ESA EUB Program Board (Exploration and Utilization Board).
- Frequent contacts at CEO level with major Italian companies in the space area, and with the national space industrial associations
- ASI project manager for the International Space Station
- ASI representative for various ISS program boards; on top of all, ASI delegate at the Space Station Control Board (SSCB)
- Senior Agency Manager at the International Space Exploration Coordination Group (ISECG)
- Speaker in public outreach events, on tv/radio/media streaming transmissions, on educational events, author of scientific and informative papers.

Business or sector Government, Space, ESA, NASA, International cooperation, Space Exploration

Oct 2016 - today

Adjunct professor for master classes

- Professor @ the Solar System Exploration course, 2022, Master degree in Earth and Planet Science, Gabriele D'Annunzio University, Chieti, Italy
- Professor @ the Space Biology for Human Health summer course, 2021 and 2022, Scuola Superiore Sant'Anna, Pisa
- Professor @ the Master Course "Aerospace Medicine", 2021 edition, Federico II University, Napoli
- Professor @ the Master Course "Space Mission Science, Design and Application (SPICES)", 2021 and 2022 editions; Alma Mater University, Bologna
- Professor @ the Master Course "Space Exploration and Exogeography", 2021; European University, Rome
- Member of the Research and Technology innovation Department, Universalus Consortium, October 15, 2020 – on
- Professor @ the Master Course "Capacity Building in Astronautics", 2019; Sapienza University, Rome
- Professor @ the Master Course "Space Mission Design and Management", 2018; Aerospace Engineering School, Rome
- Professor @ the 26th ECSL Summer Course on Space Law and Policy, 2017, Sapienza University, Rome
- Professor @ the Master Course "Space Policies and Institutions", 2017; Italian School for the International Organization
- Professor @ the 12th, 13th and 16th Advanced Aviation Medicine Course, 2016, 2017 and 2022 editions; Italian

Air Force High School

Business or sector Government, High Education, Research, Space, International cooperation

Nov 2015 – Nov 2020 **Head of the Human Spaceflight and Microgravity Unit**
Italian Space Agency, ASI, Rome, Italy (www.asi.it)

- Head of Unit (Human Spaceflight and Microgravity, VUM)
- Manager of 14 people total (8 resources in VUM unit, plus 6 additional resources who are in charge of projects directed by VUM). Responsible for an overall budget of more than 160 M€/year.
- National delegate at the HME (Human Spaceflight, Microgravity and Exploration) ESA programme board; managed budget of about 200 M€/year
- National delegate at the EUB (Exploration Utilization Board) ESA programme board;
- Responsible for the activities coordinated by the Italian Space Agency concerning the Human Spaceflight, the ISS and the research in microgravity
- Sole project manager (for the Italian law, “Responsabile unico del Procedimento – RUP”) for the contracts managed by the Human Spaceflight and Microgravity unit (over 70 contracts); responsible for 6 interagency agreements (3 NASA-ASI, 3 ESA-ASI), responsible for two ongoing industrial competitions. National managed budget: more than 10M€/year.
- Italian Delegate at the Space Station Control Board, SSCB
- ASI Senior Agency Manager at the International Space Exploration Coordination Group (ISECG)
- Safety responsible for the VUM unit as for Italian law D LGS 81/2008
- Outreach activities (speeches during public ceremonies, lectures at Master courses, talks and interviews on information media, articles on newspapers and magazines).

Business or sector Government, Space, ESA, NASA, International cooperation, Space Exploration

Sept - Dec 2015 **Responsible for the Italian Rights of Utilization of the International Space Station**
Italian Space Agency, ASI, Rome, Italy (www.asi.it)

- Responsible for the Italian rights of utilization of the International Space Station
- Responsible for the ASI contract (3M€) of industrial support services for the utilization of the ISS

Business or sector Government, Space, International Cooperation

Nov 2004 - Nov 2015 **Program manager**

Italian Space Agency, ASI, Rome, Italy (www.asi.it)

- Program manager of ASI research and industrial contracts in the areas of ISS and Launchers, for an overall value of all managed contracts of more than 25M€;
- ASI representative at the NASA International Configuration Management Team (ICMT), Multilateral Vehicle Control Board (MVCB), International Human Research Complement Working Group (IHRWG).
- Coordinator and ASI responsible of the scientific teams for the mission Esperia (2007), Dama (2011), Volare (2013), Futura (2014-2015); these missions were flights of ESA astronauts of Italian nationality on board the ISS, which Italy gained through its direct agreements with NASA (Memorandum of Understanding).
- Project Controller for all the research and technology contracts of the ASI Medicine and Biotechnology Unit (total contracts value: over 50M€)
- Coordinator of the development, the integration and the operations of more than 20 Italian payloads onboard the ISS.
- Responsible for contractual joint ventures between ASI and private partners, in the frame of the activation of public/private partnerships by ASI.
- ASI delegate at the COPUOS as ASI expert for the use of Nuclear Power Sources
- Lecturer for young students (age 8-18) on the human spaceflight and on the ASI activities; speaker during institutional events, workshops, conferences, radio and tv programmes relevant to the human spaceflight, the ISS and the related Italian activities

- coordinator or member of committees for the evaluation and selection of projects following public competitions, for the acceptance tests of hardware sponsored by ASI, for the recruitment of new staff.

Business or sector Government, Space, International Space Station

May 2005 – May 2010

Returning Officer

Foreign Constituency (Castelnuovo di Porto, Rome)

Returning Officer for the polling station

Business or sector Government

Apr - Nov 2004

Project controller

Consorzio Saturno, High Speed Trains, TAV, Rome, Italy (http://www.consorziosaturno.it/en/17_consorzio)

- Project Control for the electric and signalling infrastructures for the high speed railway connecting Milan to Turin – contract value 298M€

Business or sector Transportation

Mar 2002 - Feb 2004

ASI representative at NASA Johnson Space Center, Houston, Texas

NASA, Johnson Space Center, Houston, Texas (<https://www.nasa.gov/centers/johnson/home/index.html>)

- ASI NASA interface for the activities concerning the Italian utilization of the ISS
- ASI liaison office management
- Coordination of the ALTEC staff located at JSC under ASI contract
- ASI representative at the NASA boards relevant to the ASI utilization

Business or sector Government, Space, International Cooperation

Dec 2000 – Feb 2002

Technical assistant to the commercial directorate

Edison Energia, Milan, Italy (<https://edisonenergia.it/>)

- Technical, commercial and regulatory consultant for the customers of the company; the customers were big enterprises with large energy consumption
- Customer relationship management
- Analysis of disruptions, management of relationships between customers and local energy distributors
- Technical, commercial and regulatory training for local commercial representatives
- Description and explanation of company's commercial offers to industrial associations

Business or sector Energy, Commercial

May - Nov 2000

Collaborations on intelligence and security management activities

Oroborus, Intelligence and Security management, Milan, Italy (<http://www.orooborus.eu/>)

- Onsite inspections
- Production of technical reports in English language

Business or sector Security management

May – Dec 2000

Teacher

CEPU, Rome, Italy (<http://www.cepu.it/index.aspx>)

- Tutor and teacher for university students

Business or sector Education

Aug - Sept 2000

Teacher

Centro Studi Universitari, via Pavia, 3, Rome, Italy

- Mathematics teacher for 25 student classes

Business or sector Education

Jan 2003- July 2011

Writer

- Ideation, description and publishing on website (for the Francigena path: <http://www.paolaegino.it/MTB/descrizioni/francigena.htm>) and on book (for the historic and archaeological trails in Sabina, <http://www.edizionisabinae.com/wordpress/?s=mtb>) of mountain bike trails of naturalistic, historical and archaeological relevance.

Business or sector Writer / Book publishing

EDUCATION AND TRAINING

Certifications

Feb - Jul 2009

Master in Space politics and institutions

Italian Society for international organizations (SIOI), Rome, Italy

Aug - Sept 2003

Astronaut Instructor Trainer

Nasa, Mission Operations Directorate, Houston, Texas, USA

Mar – Jun 2001

Enterprise Economics course, levels I – II – III

University of Castellanza, Milan, Italy

May 2000

State examination and graduation to professional engineer

University “Sapienza”, Rome, Italy

Apr 2000

Master degree in mechanical engineering, 110 cum laude

University “Sapienza”, Rome, Italy

Jul 1995

English as a foreign language, Advanced level

Anglia Polytechnic University, Cambridge, UK

EDUCATION AND TRAINING

Other specializations

Nov 2015 – Feb 2016

The PA program manager role and responsibilities in the Italian law

Italian Space Agency, Rome, Italy

Jan 2016

BLS & AED certification

Italian Red Cross, Rome, Italy

May 2015

Decision making school

MBDA University, Rome Italy

Dec 2014

Self-promotion

AD Global solutions, Rome, Italy

Oct 2014

Public contracts Italian regulation

Maceroni lawyer’s office, Rome, Italy

Dec 2013

Public employees code of conduct

Italian courthouse, Rome, Italy

Apr – May 2013

Italian laws 135/2012 Spending Review and L 190/2012 anti-corruption: responsibilities

LUISS Business School, Rome, Italy

Nov 2011

Soft skills and problem solving

LUISS Business School, Rome, Italy

- Feb 2009 – Jul 2010 **Basic French Course**
Centre Culturel Saint Louis De France, Rome, Italy
- Oct 2007 **Course on Administrative law (Italian law 241/90) and Privacy law**
Italian courthouse, Rome, Italy
- Sept 2007 **Project management**
LUISS Business School, Rome, Italy
- Sept – Dec 2006 **Public speaking**
University Sapienza, Rome, Italy
- Mar 2006 **Administrative law**
Italian Space Agency, Rome, Italy
- May 2001 **Communication skills**
Edison Energia, Milan, Italy

PERSONAL SKILLS

Mother tongue(s) **Italian**

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2 proficient	C2 proficient	C2 proficient	C2 proficient	C2 proficient
	Replace with name of language certificate. Enter level if known.				
French	A1 basic	A2 basic	A1 basic	A1 basic	A1 basic
	Replace with name of language certificate. Enter level if known.				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills In my long and strong experience in managerial areas I learnt that the best success on both personal and job related stand points can be achieved only in cooperation with the others, in a positive environment to be built patiently through determination and mutual consensus. I always try to expend myself to the maximum possible extent to create a positive working atmosphere and to reach win win solutions that may lead to the satisfaction of all the parties involved.

Organisational / managerial skills Dynamic and proactive, I organize my time by defining the ultimate goal and planning all the activities that are necessary to achieve it. Also, a method that I follow with very good results consists in defining and proposing easily achievable intermediate goals.
 Most, I keep thinking that building, keeping and fostering good human relations, together with giving the best possible example with a work approach inspired by honesty, consistency and determination, is the best way to achieve results, both in terms of outcome for the Company/Agency, and to keep and grow my credibility and my leadership skills.

Job-related skills Leadership – acquired through many years in the lead of many projects, and fostered recently as I become directly responsible of a team of 7 people.
 Ability to keep a general view of the situations, in order to facilitate “out of the box” solutions to solve problems and look for possible ways forward
 Resilience, acquired through many years spent in situations that were not always easy, and that taught me that anyone may have the power to change things and make them work the right way – it’s just a matter of willingness.
 Very good relational and interpersonal skills; starting my job career in the commercial field, I soon learnt that social skills are the real keys to ease many working solutions, and that such skills must equally balance your technical capabilities.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Independent user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user

[Digital competences - Self-assessment grid](#)

Very good knowledge of the following OS: Windows (3.11, 9x, NT4, 2k, Xp, vista, 7, 8, 10), Linux, UNIX, Dos, Mac OS; Advanced programming in Visual Basic, Matlab, Fortran 77; Deep knowledge of word processors (TEX, MS Word, Word Perfect), spreadsheet sw (MS Excel), database sw (Access, DB3, Business Object), CAD software (AutoCAD), project management tools (MS Project, Open Plan), MS PowerPoint, MS Office

Driving licence A, B

ADDITIONAL INFORMATION

- Publications** - Silvia Ciccarelli, Ferdinando Cassese, **Gabriele Mascetti**, Patrizio Massoli, Luca Parmitano, Salvatore Pignataro, Filippo Ugolini, "PUBLIC-PRIVATE PARTNERSHIPS TO DEVELOP NEW APPLICATIONS FROM SPACE RESOURCE UTILISATION: THE CASE OF GREEN AIR EXPERIMENTS ON BOARD THE ISS", IAC-15,E6,IP,3,x29711
- Silvia Natalucci e **Gabriele Mascetti**, La Qualità italiana nello spazio, La Qualità a servizio della ricerca scientifica e tecnologica a bordo della Stazione Spaziale Internazionale (ISS), Rivista "Qualità", numero 5, settembre ottobre 2015, pagine 7-11
- Salvatore Pignataro, Delfina Bertolotto, **Gabriele Mascetti**, Gianluca Neri, Fabrizio Carrai ASI ISS SCIENCE DIRECTORY: ARCHIVING AND DISSEMINATING THE RESULTS OF THE ITALIAN SPACE AGENCY SCIENCE ON THE INTERNATIONAL SPACE STATION; IAC 2015, Flight & Ground Operations of HSF Systems - Joint Session of the Human Spaceflight and Space Operations Symposia (4-B6.5)
- Portable on Orbit Printer 3D: 1st European Additive Manufacturing Machine on International Space Station, Giorgio Musso, Giuseppe Lentini, Luca Enrietti, Costantino Volpe, Elisa Paola Ambrosio, Massimo Lorusso, **Gabriele Mascetti** and Giovanni Valentini, Advances in Physical Ergonomics and Human Factors, AHFE 2016 International Conference on Physical Ergonomics and Human Factors, July 27-31, 2016, Walt Disney World®, Florida, USA
- The possible Italian participation in the NASA Asteroid Redirect Mission (ARM) program and the Journey to Mars: the next steps for Human Space Exploration and after International Space Station, IAA Human Space Exploration Conference 2016, Korolyov, May 25, 2016 Technical Session 5 -- Future human space projects. Scientific approach and concepts, Marco Tantardini, Enrico Flamini, **Gabriele Mascetti**, et al.
- Biomedical Technology in Space: Results from the Futura Mission of the Italian Space Agency, Delfina Bertolotto, Marino Crisconio, **Gabriele Mascetti**, Salvatore Pignataro, 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 2015
- ITALIAN SPACE AGENCY SCIENCE ON THE INTERNATIONAL SPACE STATION: THE FUTURA MISSION, IAC-15,B3,3,4,x30837, Salvatore Pignataro, Delfina Bertolotto, Vittorio Cotronei, Marino Crisconio, **Gabriele Mascetti**, Gianluca Neri
- Salvatore Pignataro, **Gabriele Mascetti**, Capturing the secrets of weightless movements for Earth applications, Benefits For Humanity 2015, NASA
- **Gabriele Mascetti**, Michela Sinesi, Sabina in MTB, Edizioni Sabinae, 2011 (book, 168 pages, ISBN: 8896105854, ISBN-13: 9788896105856)
- Gianluca Neri, **Gabriele Mascetti**, Valfredo Zolesi, ELITE S2 – A Facility for Quantitative Human Movement Analysis on Board the ISS, art 3A10 1007 2Fs12217-014-9396-7
- **Gabriele Mascetti**, Salvatore Pignataro, Delfina Bertolotto, Alessandro Bellomo, Dario Castagnolo, Walter Villadei, The Italian Space Agency DAMA Mission research plan. Implementation, execution and outcomes of the experiments. IAC-12,A2,7,3,x15358
- **G Mascetti**, M Spagnulo, E. D'Aversa, A. de Lillis, T. Genito, P. Petrelli, M. Balduccini, The Italian Space Agency VEGA GNC project: feasibility of a national guidance, navigation and control for the VEGA launcher, 63rd International Astronautical Congress 2012
- **G Mascetti**, DArk Matter a bordo della Stazione Spaziale, SpaceMag 2011, n°5 (SpaceMag is a space related magazine published with the cooperation of ASI; first number has been issued in 2009 and is downloadable here: <http://www.asi.it/it/news/nasce-spacemag>; the publication has been discontinued in 2015)
- Loredana Santo · Fabrizio Quadri · Erica Anna Squeo · Ferdinando Dolce · **Gabriele Mascetti** · Delfina Bertolotto · Walter Villadei · Pier Luigi Ganga · Valfredo Zolesi, Behavior of Shape Memory Epoxy Foams in Microgravity: Experimental Results of STS-134 Mission, DOI 10.1007/s12217-012-9313-x
- Alessandro Donati, Loredana Santo, Antonio De Sio, **Gabriele Mascetti**, Pier Luigi Ganga, Valfredo Zolesi, RIBES

PRECURSOR PAYLOAD ON BION-M1, IAC-13-A2.3.2

- **G Mascetti**, "Expedition 36/37": sei mesi impegnativi a bordo della ISS, SpaceMag 2013, n° 1
- Loredana Santo, Fabrizio Quadri, **Gabriele Mascetti**, Ferdinando Dolce, Valfredo Zolesi, Mission STS-134: Results of Shape Memory Foam Experiment, S0094-5765(13)00207-5
- Maria Teresa Giardi, Eleftherios Touloupakis, Delfina Bertolotto, **Gabriele Mascetti**, Preventive or Potential Therapeutic Value of Nutraceuticals against Ionizing Radiation-Induced Oxidative Stress in Exposed Subjects and Frequent Fliers, Int. J. Mol. Sci. 2013, 14, 17168-17192; doi:10.3390/ijms140817168
- L. Santo, F. Quadri, W. Villadei, **G. Mascetti**, V. Zolesi, Shape memory epoxy foams and composites: ribes_foam2 experiment on spacecraft "bion-m1" and future perspective, Procedia Engineering 104 (2015) 50 – 56, doi: 10.1016/j.proeng.2015.04.096
- E. MARTINELLI, E. ZAMPETTI, S. PANTALEI, F. LO CASTRO, M. SANTONICO, PENNAZZA G., R. PAOLESSE, **G. MASCETTI**, V. COTRONEI, F. GIANNINI, C. DI NATALE AND A. DAMICO (2007). Design and test of an Electronic Nose for monitoring the air quality in the International Space Station. MICROGRAVITY SCIENCE AND TECHNOLOGY, vol. XIX, 5/6, ISSN: 0938-0108
- co-author of the article "Elite S2 – an instrument for motion analysis on board the International Space Station", accepted for presentation at the International Astronautical Congress (IAC) 2009
- co-author of the article "ASI Program – Virtual Reality in Neutral Buoyancy," published and presented at the International Astronautical Congress 2008
- co-author of the article "ASI Biological Experiments operational development – Mission STS-120/10A", published and presented at the International Astronautical Congress 2008
- co-author of the article "EDUSAT: an Educational Satellite for the Italian High School Students", presented at the International Astronautical Congress 2008
- co-author of the article "Sensory-Motor Integration and Motor Learning Onboard the ISS", published and presented at the International Astronautical Congress 2008
- co-author of the article "The EDUSAT Microsatellite", presented at the XX Congress of the Italian Association of Aeronautics and Astronautics, June-July 2009
- co-author of the article "Design of a Small Educational Satellite for the Italian High School Students: the EduSAT Project", presented at the VII International Academy of Astronautics (IAA) Symposium on Small Satellites for Earth Observation, May 2009
- co-author of the article "Space explorer international: fitness challenge 2010 (SEI)", published and presented at the International Astronautical Congress 2009